CLAIMS

1. A method of downloading data to a receiver/decoder, comprising the steps, at the receiver/decoder, of:

receiving a bitstream including the data;

downloading a loader for loading the data from the bitstream into the receiver/decoder; and

downloading said data from the bitstream using said downloaded data loader.

10

- 2. A method according to Claim 1, wherein the downloaded data loader is deleted from the receiver/decoder after the data has been downloaded from the bitstream.
- 3. A method according to Claim 1, wherein the downloaded data loader is subsequently stored in non-volatile memory of the receiver/decoder.
 - 4. A method according to Claim 3, wherein the non-volatile memory is a Flash memory volume of the receiver/decoder.
- 20 5. A method according to any preceding claim, wherein the downloading of the data is performed by the downloaded tata loader.

6. A method according to any preceding claim, wherein a portion only of data stored in the receiver/decoder is replaced by a corresponding portion of data downloaded by the downloaded data loader.

A method according to any preceding claim, wherein the bitstream includes at least one data loader, said method further comprising the steps, at a transmitting system, of:

for the or each data loader, dividing the data loader into a plurality of modules; and

for the or each data loader, dividing the data into a respective plurality of

modules, each plurality of data modules being associated with a respective plurality of data loader modules.

8. A method according to Claim 7, further comprising the steps, at the transmitting system, of:

for the or each data loader, formatting each of the modules as a respective table, the tables having the same respective table identification ("TID") and respective different table identification extensions ("TID-extensions"); and

for the or each plurality of modules of data, formatting each of the modules of data as a respective table, the tables having the same respective TID as the tables of the data loader modules associated therewith and respective different TID-extensions.

9. A method according to Claim 8, comprising, in said downloading steps, of downloading module tables having the same TID.

15

20

30

10

5

- 10. A method according to Claim 9, wherein said tables have respective different TID-extensions other than a predetermined TID-extension; and further comprising the step, at the transmitting system, of generating a respective directory table for the or each plurality of modules having the same TID, the or each directory table having said predetermined TID-extension and that TID, the directory table containing for each of the modules a name of that module and the respective TID-extension.
- 11. A method according to Claim 10, further comprising the steps, at the receiver/decoder of:

downloading one of the tables having the predetermined TID-extension so as to download a directory table;

determining from the content of the directory table the TID-extensions of the module tables having the same TID as the directory table; and

in said downloading steps, downloading the module tables having the same TID as that of the downloaded directory table and TID-extensions determined from the downloaded directory table.

5

20

25

12. A method according to any preceding claim, further comprising the step, at a transmitting system, of generating a directory table having a predetermined table identification ("TID") and containing, for each of a plurality of version identifications of a receiver/decoder, a respective TID associated with that version identification.

47

13. A method according to Claim 12, wherein the version identification comprises a code for the version of the receiver/decoder and a code for the manufacturer of the receiver/decoder.

10 14. A method as claimed in Claim 12 or 13 when dependent upon Claim 11, further comprising the steps, at the receiver/decoder, of:

downloading said directory table having the predetermined TID; and determining the version identification of the receiver/decoder;

wherein the step of downloading a directory table comprises downloading that
one of the tables having a TID associated with the version number of the
receiver/decoder and the predetermined TID-extension.

15. A method according to any of Claims 10 to 14, further comprising the steps, at the transmitting system, of:

including in each transmitted directory table a directory version identification therefor; and at the receiver/decoder:-

determining whether the directory version identification of a currently transmitted directory table is more recent than the directory version identification of a previously downloaded directory table having the same TID as said currently transmitted directory table, and if not, aborting the downloading of data.

- 16. A method according to any preceding claim, further comprising the step, in a transmitting system, of:
- including in the bits tream a data version identification of the data; and, at the receiver/decoder;

determining whether the data version identification of the received data is more

- 36 -

redent than the data version identification of currently stored data, and if so, performing said step of downloading said data from the bitstream.

A 17. A method according to any preceding claim, wherein at least part of the downloaded data loader is in the form of code which is specific to the hardware of the receiver/decoder.

18. A method according to any preceding claim, further comprising the steps, at a transmitting system, of;

transmitting a second data loader included in said bitstream; and at the receiver/decoder, of:

downloading the second data loader; and

downloading one of the first-mentioned data loader and the data, said second data loader performing the downloading of one of the first-mentioned data loader and the data.

A 19. A method according to Claim 18, wherein at least part of the second data loader is in the form of code which is specific to the hardware of the receiver/decoder.

20 70.

25

10

15

A receiver/decoder comprising:

a receiver for receiving a bitstream including data;

storage means; and

downloading means for downloading from the bitstream into the storage means a loader for loading the data from the bitstream into the receiver/decoder.

21. A receiver/decoder according to Claim 20, further comprising means for deleting the downloaded data loader from the storage means after the data has been downloaded from the bitstream.

30 22. A receiver/decoder according to Claim 20, further comprising a non-volatile memory for storing the downloaded data loader after the data has been downloaded from the bitstream.

10

15

20

23. A receiver/decoder according to Claim 22, wherein the non-volatile memory is a Flash memory volume of the receiver/decoder.

24. A receiver/decoder according to any of Chains 20 to 23, wherein the downloaded data loader is adapted to perform the downloading of data from the bitstream.

25. A receiver/decoder according to any of Claims 20 to 24, wherein the downloaded data loader is adapted to replace a portion only of data stored in the receiver/decoder by a corresponding portion of data downloaded thereby.

c 1a, ~ 20

A 26. A receiver/decoder according to Claims 20 to 25, arranged to download tables.

27. A receiver/decoder according to Claim 26, wherein said downloading means is arranged to download a table having a table identification ("TID") and a predetermined table identification extension ("TID-extension") so as to download a directory table, to determine from the content of the directory table the TID-extensions of module tables having the same TID as the directory table, and to download the module tables having the same TID as that of the downloaded directory table and TID-extensions determined from the downloaded directory table so as to download said loader.

A 28. A receiver/decoder according to Claim 26 or 27, wherein said downloading means is arranged to download a directory table having a predetermined TID and containing, for each of a plurality of version identifications of a receiver/decoder, a respective TID associated with that version identification, to determine the version identification of the receiver/decoder, and to download a directory table having a TID associated with the version number of the receiver/decoder and the predetermined TID-extension.

29. A receiver/decoder according to Claim 27 or 28, wherein said downloading means is arranged to determine whether a directory version identification of a currently transmitted directory table is more recent than the directory version identification of a previously downloaded directory table having the same TID as the currently transmitted

directory table, and if not, to abort the downloading of said loader.

30. A receiver/decoder according to any of Claims 20 to 29, wherein the data loader is in the form of code which is specific to the hardware of the receiver/decoder.

downloading means is arranged to download a second loader included in data included in said bitstream for downloading one of the first-mentioned loader and the data.

10 32. A transmission system comprising:

means for transmitting a bitstream including at least one loader for loading data into a receiver/decoder, and data associated with the or each loader; and means for dividing the or each loader into a plurality of modules and dividing the data associated with the or each loader into a respective plurality of modules for transmittal by said transmitting means.

33. A transmission system according to Claim 32, further comprising:

means for formatting each of the modules of the or each loader as a respective table, the tables of the or each loader having the same respective table identification

("TID") and respective different table identification extensions ("TID-extensions"); and means for formatting each of the modules of the data associated with the or each loader as a respective table, the tables of the modules of data having the same respective TID as the tables of the loader modules associated therewith and respective different TID-extensions.

A transmission system according to Claim 33, wherein said tables have respective different TID-extensions other than a predetermined TID-extension; said system further comprising means for generating a respective directory tables for the or each plurality of modules having the same TID, each directory table having that TID and said predetermined TID-extension, the directory containing for each of the modules a name of that module and the respective TID-extension.

25

30

A

5

- 39 -

- 35. A transmission system according to any of Claims 32 to 34, further comprising:
 means for generating a directory table having a predetermined table identification
 ("TID") and containing, for each of a plurality of version identifications of a
 receiver/decoder, a respective TID associated with that version identification.
- A 36. A transmission system according to any of Claims 32 to 35, further comprising means for including in each transmitted table a version identification therefor.
- 37. A transmission system according to any of Claims 32 to 36, wherein the or each 10 loader is in the form of code which is specific to the hardware of the receiver/decoder.
 - 38. A combination of a receiver/decoder according to any of Claims 20 to 31 and a transmission system according to any of Claims 32 to 37.
 - 39. A signal including at least one loader for loading data into a receiver/decoder, and data associated with the or each loader, the or each loader being divided into a plurality of modules and the data associated with the or each loader being divided into a respective plurality of modules.
- 20 40. A method of downloading data to a receiver/decoder substantially as herein described.
 - 41. A receiver/decoder substantially as herein described.
- 25 42. A transmission system substantially as herein described.

all az

